IN THE SPECIFICATION:

Please amend the paragraph starting at page 1, line 10 and ending at line 19, as follows:

--A bar-shaped vibration wave driving apparatus includes, as a basic structure, a vibration element composed of elastic members made of metal or the like and a piezoelectric element as an electro-mechanical energy conversion element. The bar-shaped vibration wave driving apparatus generates a driving vibration, ~~vibration~~ such as a travelling wave or the like, ~~like~~ through application of an alternating voltage ~~as~~ (an alternating signal), with different phases, ~~phases~~ to the piezoelectric element.--

Please amend the paragraph starting at page 1, line 26 and ending at page 2, line 3, as follows:

--There is a vibration wave motor, ~~motor~~ as an example of such a vibration wave driving apparatus, ~~apparatus~~ in which a vibration element is used as a stator, and the ~~and a~~ contact member is ~~as~~ a rotor.--

Please amend the paragraph starting at page 2, line 4 and ending at line 10, as follows:

--Examples of the vibration element of such a ~~the~~ vibration wave motor include those with a configuration in which a ring-shaped piezoelectric element plate is attached to one surface of a ring- or disc-shaped elastic member and those of a type in which the rotation of the rotor is taken out through an output shaft or of a type in which ~~the~~ rotation of the rotor is taken out directly.--

Please amend the paragraph starting at page 2, line 21 and ending at page 3, line 12, as follows:

--Reference numeral 101 indicates a first elastic member; 102, a second elastic member; and 103, a piezoelectric element. Reference numeral 106 denotes a shaft member passing through the first elastic member 101, the piezoelectric element 103, and the second elastic member 102. One end of the shaft member 106, ~~106~~ located on the side of a rotor 110, ~~110~~ is fixed to a fitting member 109 to be attached to a product, ~~product~~ and the latter ~~other~~ end is fixed to a nut 115. A threaded portion is formed in the other end of the shaft member 106. With the nut 115 tightened, the first elastic member 101, the piezoelectric element 103, and the second elastic member 102 disposed between a flange portion provided for the shaft member 106 and the nut 115 are sandwiched and fixed therebetween. Reference numeral 110 indicates the rotor, ~~rotor~~ as described above, and reference ~~Reference~~ numeral 107 denotes a friction member fixed to the first elastic element 101 to be in contact with the rotor.--

Please amend the paragraph starting at page 3, line 13 and ending at line 20, as follows:

--When a driving signal is applied to the piezoelectric element 103, a bending ~~the bending~~ vibration (e.g., ~~in~~ FIG. 10B illustrates a primary bending vibration) ~~indicated in FIG. 10B~~ is excited in the bar-shaped vibration element, whereby the bar-shaped vibration element makes a swing movement substantially about the z-axis. In this manner, ~~Accordingly,~~ the friction member 107 may be caused to make ~~makes~~ a circular motion around the z-axis.--

Please amend the paragraph starting at page 3, line 21 and ending at line 25, as follows:

--It seems that the vibration element of such a bar-shaped vibration wave driving apparatus has been reduced in size in its radial direction, but there is still room for reduction in size in its thrust direction, i.e., ~~i.e.~~ in the length of its axis.--

Please amend the paragraph starting at page 3, line 26 and ending at page 4, line 11, as follows:

--However, when the vibration element is simply shortened, there arise problems in that the resonance frequency increases and the vibration displacement is reduced, which causes a ~~the~~ deterioration in the efficiency of friction drive, an ~~the~~ increase in price of a driving circuit element due to the high frequency, and/or an ~~or the~~ increase in loss inside the element. Further, when the vibration element is simply made thinner to lower the resonance frequency, the diameters of a piezoelectric element and a frictional surface are also reduced, ~~reduced and~~ thus decreasing a generating force of the piezoelectric element and the friction torque ~~also decrease~~. Therefore, it is conceivable that the output of the motor is made small.--

Please amend the paragraph starting at page 4, line 12 and ending at line 16, as follows:

--As a technique for solving the above problems and shortening the axial length of a bar-shaped vibration wave driving apparatus, Fig. 11 illustrates ~~there is~~ one

disclosed in Japanese Patent Application Laid-open No. 2001-145376~~, which is shown in FIG. 11~~.--

Please amend the paragraph starting at page 5, line 4 and ending at line 12, as follows:

--According to this technique, however, when the connection part 210 is made thin to allow the resonance frequency to be lowered, ~~lowered and~~ its rigidity is deteriorated, and ~~the~~ displacement generated in the piezoelectric element is absorbed by a soft spring of the connection part 210. Consequently, it is difficult to transmit the driving force to a rotor efficiently. Thus, it seems that there is still room for further improvement.--

Please amend the paragraph starting at page 5, line 15 and ending at page 6, line 11, as follows:

--One aspect of this invention is to provide a vibration wave driving apparatus including an electro-mechanical energy conversion element that is sandwiched and fixed between elastic members, wherein a third elastic member is provided between the electro-mechanical energy conversion element and one of the elastic members. The third elastic member has a ~~large~~ diameter larger than that of the electro-mechanical energy conversion element. When a driving vibration is applied to the electro-mechanical energy conversion element, a vibration element excites a bending vibration and this bending vibration allows an out-of-plane bending vibration to be excited in the third elastic member. Since a rotor is brought into contact with the third elastic member sandwiched between the elastic member and the electro-mechanical energy conversion element, the size

of the vibration wave driving apparatus can be reduced. In addition, since a travelling wave produced by the bending vibrations of the vibration element and a travelling wave produced by the out-of-plane bending vibrations of the third elastic member are generated at the frictional surface of the vibration element, the output of the vibration wave driving apparatus can be improved.--

Please amend the paragraph starting at page 8, line 13 and ending at page 9, line 2, as follows:

--In FIG. 1, the vicinity of the outer periphery of the surface of the flange-shaped elastic member 5 located on a side ~~the~~ opposite a ~~side to an~~ piezoelectric element 3 is a portion that comes into contact with a rotor and is formed to be slightly thicker, ~~thicker~~ like its center portion in which the flange-shaped elastic member 5 is supported and fixed by the first elastic member 1. This is intended to reduce the area to be subjected to lapping process by allowing the region between the center portion and the vicinity of the outer periphery to be recessed, and thereby to reduce processing time. In this case, as is apparent from FIG. 1, the vicinity of the outer periphery of the flange-shaped elastic member 5 extends outward beyond the outer peripheral portions of the first elastic member 1 and the piezoelectric element 3 that are adjacent to the flange-shaped elastic member 5.--

Please amend the paragraph starting at page 9, line 3 and ending at line 10, as follows:

--Reference numeral 3 denotes a group of piezoelectric elements. The ~~As~~ ~~the~~ group of piezoelectric elements may be, e.g., ~~one of~~ a stacked type piezoelectric group ~~is disposed~~ that is formed with a plurality of elements each having electrodes both on

its ~~both~~ upper and lower sides, ~~sides~~ or a plurality of thin-film piezoelectric members having electrodes both on its ~~both~~ upper and lower sides stacked and hardened by heating to form one body.--

Please amend the paragraph starting at page 9, line 15 and ending at page 10, line 10, as follows:

--The first elastic member 1, the second elastic member 2, the flange-shaped elastic member 5, and the piezoelectric element 3 are combined to form one body by means of a shaft member 6 as a fastening means. The shaft member 6, ~~6~~ with a threaded portion formed on its one end, ~~end~~ is inserted from the end portion of the first elastic member 1 so as to be passed through the piezoelectric element 3, ~~3~~ and then the threaded portion is screwed together with an internal threaded portion formed in the axis center portion of the second elastic member 2. The flange-shaped elastic member 5 and the piezoelectric element 3 are disposed between the first elastic member 1 and the second elastic member 2 and, ~~and~~ in this state, the whole can be sandwiched and fixed by a flange portion provided in ~~for~~ the shaft member 6 in its middle portion and the threaded portion provided at an end portion of the shaft member 6. The other end portion of the shaft member 6 is fixed to a fitting member 9 and supports the whole bar-shaped vibration element. In the present embodiment, the vibration element is formed so that all its members except the flange-shaped elastic member 5 have the same outer diameter.--

Please amend the paragraph starting at page 10, line 18 and ending at page 11, line 1, as follows:

--At that time, the position of the anti-node of the primary bending vibration, ~~vibration~~ which is displaced in a radial direction and is excited in the above-mentioned bar-shaped vibration element, ~~element~~ is arranged in a position off the center surface of the flange-shaped elastic member 5. The "radial direction" as used herein denotes a direction included in a plane orthogonal to a straight line passing through the respective centers of the first elastic member 1, the flange-shaped elastic member 5, the piezoelectric element 3, and the second elastic member 2.--

Please amend the paragraph starting at page 11, line 2 and ending at line 7, as follows:

--As the bending vibration generated in the bar, a higher-order vibration such as a second- or ~~second-or~~ third-order vibration, ~~vibration~~ also may be used without causing any problem. In such a case, however, it is necessary to dispose the flange-shaped elastic member 5 in a position off the position of the anti-node of such a vibration.--

Please amend the paragraph starting at page 12, line 23 and ending at page 13, line 7, as follows:

--It is a well-known phenomenon that an ~~the~~ elliptical motion is produced at the flange-shaped elastic member surface when a travelling out-of-plane bending vibration is generated in a flange-shaped object. Hence, when the rotation direction of this elliptical motion is allowed to coincide with the rotation direction of a circular or elliptical motion produced in the flange-shaped elastic member by ~~the~~ rotation of the bending vibration of the bar-shaped vibration element, the rotational speed of a rotor pressed by the flange-

shaped elastic member is increased, whereby ~~and thereby the~~ motor performance is improved.--

Please amend the paragraph starting at page 13, line 8 and ending at line 14, as follows:

--When the flange-shaped elastic member is provided below the center position of the anti-node of a bending vibration acting on the flange-shaped elastic member, the location where the rotor and the vibration element are ~~is~~ in contact with each other can be lowered, ~~lowered~~ and thereby the size of the overall ~~whole~~ vibration wave driving apparatus can be reduced.--

Please amend the paragraph starting at page 13, line 26 and ending at page 14, line 10, as follows:

--With respect to the direction of the circular or elliptical motion produced by the bending travelling wave of the flange-shaped elastic member, the directions at points B1 and B2 are opposite ~~to~~ each other in FIGS. 3A and 3B, the directions at points B3 and B4 are opposite ~~to~~ each other in FIGS. 4A and 4B, and furthermore the directions at points B3 and B3' and the directions at points B4 and B4' each also are opposite ~~to~~ each other. The relationship between the points B3 and B3' and that between the points B4 and B4' each correspond to the relationship between the inside and outside of a node circle.--

Please amend the paragraph starting at page 15 line 23 and ending at page 16, line 4, as follows:

--Furthermore, in the present embodiment, a member 17 having abrasion resistance is attached to a frictional portion subjected to friction with an unshown rotor on one surface of the outer peripheral portion of the flange-shaped elastic member 15, ~~15~~ as a flange-shaped protruding portion. Since the frictional member 17 is so disposed, it is no longer necessary to carry out lapping process with respect to the flange-shaped elastic member.--

Please amend the paragraph starting at page 16, line 8 and ending at line 18, as follows:

--A vibration element of the present embodiment includes a first elastic member 21, a second elastic member 22, a piezoelectric element 23, and a flange-shaped elastic member 25, ~~25~~ as well as an unshown fastening means, ~~means~~ as in the first embodiment. The present embodiment is different from the first embodiment in that a protrusion 25a is formed in the outer peripheral portion of the flange-shaped elastic member 25 and a circular groove 25b is provided on the inner peripheral side with respect to the protrusion 25a.--

Please amend the paragraph starting at page 16, line 19 and ending at line 25, as follows:

--As a result, the flange-shaped elastic member 25 is configured to have an increased weight at its outer peripheral end portion and lower stiffness on its inner peripheral side. Thus, an out-of-plane displacement is augmented in the outer peripheral portion of the flange that comes into contact with a rotor, whereby ~~and thereby~~ the rotational speed of the rotor further increases.--

Please amend the paragraph starting at page 18, line 16 and ending at page 19, line 19, as follows:

--As shown in Figure 9 ~~the figure~~, in the bar-shaped vibration element of the present embodiment, a first elastic member 51, a second elastic member 52, a piezoelectric element 53, and a flange-shaped elastic member 55 are fastened together with a vibration element holding bolt ~~volt~~/supporting pin 56 as a fastening member. In addition, a fitting flange 59 to be fitted into a product is screwed and joined with a portion of the pin 56 located on position opposite ~~to~~ the second elastic member 52. An output gear 64 is attached to the fitting flange 59 so as to be rotatable about the center of the axis of the vibration element. A rotor 60 is disposed around the first elastic member 51. The rotor 60 is provided with a contact spring 61, ~~61~~ formed by press-forming, that is adhesively secured thereto on its outer peripheral side, ~~side~~ and a spring case 62 that is engaged and joined therewith an on inner peripheral side of the rotor 60. The spring case 62 is regulated by and fixed to the output gear 64 by its upper end portion so as not to be displaced relative to the output gear 64 in the radial direction. A spring 63 for applying pressing force is disposed between the lower end of the spring case 62 and the output gear 64. By the spring force of this spring 63, the spring end of the contact spring 61 fixed to the outer peripheral portion of the rotor 60 is in pressure contact with the upper surface of the flange-shaped elastic member 55. The fitting flange 59 also has a function of providing additional mass for preventing vibrations from leaking to the external environment ~~outside~~ from the vibration element holding bolt ~~volt~~/supporting pin 56.--

Please amend the paragraph starting at page 19, line 20 and ending at page 20, line 3, as follows:

--In the present embodiment, the vibration element is fixed, ~~fixed~~ and the rotor, ~~rotor~~ as a contact member that is brought into pressure contact with the vibration element, ~~element~~ is movable ~~provided movably~~. However, the present invention is not limited to this. The contact member may be fixed and the vibration element may be movable ~~provided movably~~, and the vibration element and the contact member may be frictionally driven relative to each other by the driving vibration generated in the flange-shaped elastic member protruding in a flange form of the vibration element.--

Please amend the paragraph starting at page 20, line 4 and ending at line 9, as follows:

--Similarly, ~~Similarly~~ in the second to sixth embodiments, it is to be understood that the center surface of the flange-shaped elastic member is arranged in a position that does not coincide with the position of the anti-node of a bending vibration of the bar-shaped vibration element, ~~element~~ although it is not shown in the figures.--

Please amend the paragraph starting at page 20, line 10 and ending at line 23 as follows:

--As described above, the embodiment described above employs a ~~the~~ configuration in which a flange-shaped elastic member with a frictional surface is provided for a bar-shaped vibration element and driving force is derived through the frictional surface, ~~surface~~ as well as a ~~the~~ configuration in which an elastic member protruding from

the flange-shaped elastic member portion is provided and the resonance frequency is lowered with this spring-mass system. Hence, the spring can be made considerably soft so that the resonance frequency is decreased to a sufficiently low level, i.e. the resonance frequency can be decreased to a sufficiently low level even when the diameter of the elastic member is reduced considerably.--

Please amend the paragraph starting at page 20, line 24 and ending at page 21, line 4, as follows:

--Furthermore, when the protruding elastic member portion is formed of metal, even in the case where distortion is concentrated ~~concentrates~~ thereon, the increase in internal loss stays within a minimum range since the damping characteristic of the metallic material is better than that of the piezoelectric element, ~~element~~ and thus a short vibration element with high efficiency can be obtained.--

Please amend the paragraph starting at page 21, line 5 and ending at line 13 as follows:

--In addition, to the driving force generated by a first travelling wave produced around the axis of the bar-shaped vibration element can be added a driving force generated by a second travelling wave excited in the flange-shaped elastic member. Hence, a sufficiently great driving force can be obtained through mere application of a smaller driving signal than a conventional one to an electro-mechanical energy conversion element.--

Please amend the paragraph starting at page 21, line 14 and ending at line 16, as follows:

--Moreover, since the rotor can be disposed around the protruding elastic member, the overall length of ~~as~~ the motor also may be ~~is~~ reduced.--